

[GAP-FILLING PROCESS]

Abstract of Disclosure

A gap-filling process is provided. A substrate having a dielectric layer thereon is provided. The dielectric layer has an opening therein. A gap-filling material layer is formed over the dielectric layer and inside the opening. A portion of the gap-filling material is removed from the gap-filling material layer to expose the dielectric layer. A gap-filling material treatment of the surface of the gap-filling material layer and the dielectric layer is carried out to planarize the gap-filling material layer so that a subsequently formed bottom anti-reflection coating or material layer over the gap-filling material layer can have a high degree of planarity.

Figures